### Shore rand Management

Prograi

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services, and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of Interior, Washington, D.C. 20240.

This publication is available in alternative format (large print, Braille, audio tape, etc) upon request. Please call 608-267-7694 for more information.

Artwork provided by Carol Watkins, University of Wisconsin – Extension, and Sheri Snowbank.

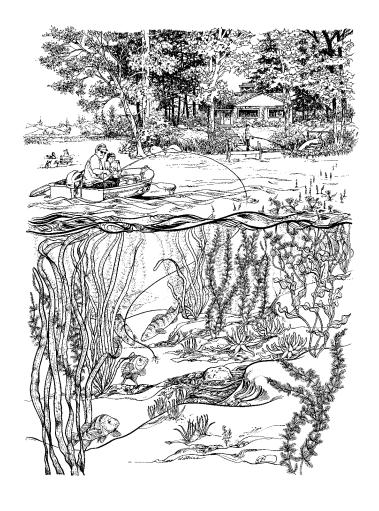
PUB-WT-749 2002





Wisconsin Department of Natural Resources Bureau of Watershed Management Box 7921 Madison WI 53707 608-266-8030

# Changing Wisconsin's Shore land Deve I opment Standards: How You Can Get Involved



"Water is the most critical resource issue of our lifetime and our children's future. The health of our waters is the principal measure of how we live on the land."

# Changing Wisconsin's Shore land Development Standards

The Department of Natural Resources is launching a broad-based effort to update its 34-year-old shoreland development standards intended to protect water quality, wildlife habitat and natural scenic beauty. The existing shoreland development standards address minimum lot sizes, setbacks for structures from the water, shoreland vegetation management and other shoreland related activities. Counties are required to adopt shoreland zoning ordinances which meet or exceed these standards.

The goal is to balance the public's rights in public waters with property owners' desires for their properties. To find that balance, DNR is forming a 25-member advisory committee, which will meet over the next year to evaluate existing statewide minimum standards and develop a range of options that reflect changes in scientific knowledge and development trends since the existing standards were originally written in the 1960s.



Wisconsin's Public Trust Doctrine – collectively the state constitution, state statutes and court rulings – provide that Wisconsin's lakes and rivers are public resources, owned in common by all Wisconsin residents. It is this trust we must balance with individual property rights if we are going to enjoy Wisconsin's water resources for generations to come.

# Review Timeline







Winter 2002 and Spring 2003 – Advisory Committee meets to review options for statewide minimum shoreland development standards in 4 specific areas including shoreland buffers and setbacks, development density, nonconforming structures and mitigation and flexibility.

Fall 2003 – Listening sessions held around the state to solicit public comments on the options reviewed by the advisory committee. Public input is very important at these sessions to provide feedback on the Advisory Committee's recommendations.

Winter 2003 and Spring 2004 – DNR staff will request authorization from the Department's policy making board, the Natural Resources Board, to conduct formal public hearings on the rule package. Again, public input at the public hearings will be very important in the formation of the final rule package.

Fall 2004 – If final approval is obtained from the Natural Resources Board, the rule will be sent to the Legislature where it will be assigned to both a Senate and Assembly Committee. These committees may also decide to hold public hearings.

# What is Wisconsin's Shoreland Management Program?

Lawmakers in the mid-1960's recognized the importance of shoreland areas and the functions they provide - protecting water quality, providing fish and wildlife habitat, and preserving natural scenic beauty - and enacted the Water Resources Act, which required counties to adopt and administer shoreland zoning ordinances based on minimum state standards. Chapter NR 115, Wisconsin Administrative Code, contains the statewide minimum standards for lot sizes, how far buildings are set back from the water's edge, shoreland vegetation management and other shoreland related activities. The Shoreland Management Program assists local governments in the administration of shoreland zoning ordinances. The standards apply only in unincorporated areas and are enforced by the counties.

## Water Quality - Did you know?

One pound of phosphorus in our lakes and rivers can produce up to 500 pounds of algae growth or aquatic plants! A study conducted at Lauderdale Lakes in southeastern Wisconsin concluded that for each acre of shoreland development with lawns and homes within 200 feet of the lake up to 1.6 pounds of total phosphorus may be delivered to the lake.

Garn, H. S. 2002. Effects of Lawn Fertilizer on Nutrient Concentration in Runoff from Lakeshore Lawns, Lauderdale Lakes, Wisconsin. US Geological Survey, Middleton, WI.

Shoreland management is a balancing act, attempting to protect our sensitive lake and river resources while respecting the rights of individual landowners. In an attempt to find this balance, nearly half of Wisconsin's counties have updated or are in the process of updating their local shoreland ordinances. Unfortunately, the current standards in Wisconsin's Shoreland Management Program may limit local innovation to protect shorelands and provide flexibility, rather than encourage it.

### Rationale for Change

In the 3O years since these minimum standards first went into effect, development patterns along our lakes and rivers have changed. Across the state, large, year-round residences are replacing small traditional summer cottages and the number of homes is increasing along Wisconsin's shorelines. A study of

Wisconsin's northern lakes found the number of waterfront homes has increased by over 200% since the 1960s. With this increasing development, there are more and more activities impacting Wisconsin's waters.



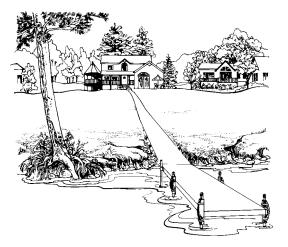
# Focusing on the Shore Land Management Issues

To ensure that the entire revision process is as open and deliberative as possible, the Department of Natural Resources is collecting information on how to improve Wisconsin's Shoreland Management Program. This includes soliciting input from you, the public, during all phases of shoreland management review process. To help you understand the issues that the Advisory Committee will be discussing, here are brief descriptions of the four main issues.

#### Shoreland Buffers and Setbacks

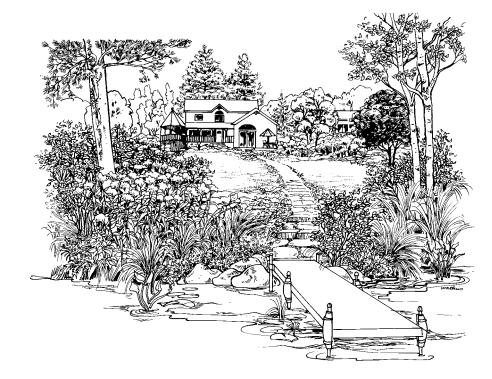
Current state standards are designed to protect a 35-foot deep buffer of vegetation along the shoreline. Property owners are allowed to clear a 30-foot wide corridor along every 100 feet of frontage. Most structures must be set back 75 feet from the ordinary high-water mark, unless there is an existing pattern of development.

**Concerns:** Shoreland vegetation removal standards are ambiguous and difficult for local governments to enforce. The current standards do not differentiate between residential uses and forestry and agriculture.



In addition, most studies recommend shoreland buffers be at least 35 to 100 feet deep to help protect water quality and fish and wildlife habitat. In certain cases, such as on steeply sloping sites, buffers greater than 100 feet may be required to

slow and infiltrate runoff. Buffers less than 35 feet deep have been generally found to be inadequate to provide long-term water quality protection in most circumstances, and are not likely to provide more than very minimal habitat for most riparian wildlife.



5

#### Development Density

Current state standards require an average minimum lot width of 65 feet and lot area of 10,000 square feet for sewered lots and 100 feet and 20,000 square feet on unsewered lots. Existing standards do not address the impacts of impervious (hard) surfaces, such as roofs, driveways, and roads.

Concerns: As shorelands become more densely developed, studies

have found fewer green frogs and native songbirds along our lakes and rivers. Research also has found that when a watershed exceeds 10% to 15% impervious surfaces, water quality is degraded and fish communities can become severely impacted.



Researchers studying 14 lakes in northern Wisconsin and Michigan's Upper Peninsula found that bluegill growth rates were significantly reduced with increasing intensity of lakeshore residential development. The researchers did not conclude that there is direct cause-effect relationship between bluegill growth and lakeshore development. It may be that alterations of riparian and littoral habitat resulting from shoreland development have reduced the capacity of lakes to maintain productive fish populations and changes in land use patterns are beginning to compromise the ecological integrity of lake ecosystems.



Schindler, D. E., S. I. Geib, and M. R. Williams. 2000. Patterns of Fish Growth along a Residential Development Gradient in North Temperate Lakes. Ecosystems 3: 229 - 237.

### Nonconforming Structures

Current state standards require counties to limit the alterations, additions to, and repairs of nonconforming structures. The current standard suggests limiting these costs to 50% of the structure's equalized assessed value over its life. This standard is often referred to as the "50% rule."

Concerns: The 50% rule is difficult for county staff to administer, track and enforce. Many counties are interested in adopting alternative methods to regulate nonconforming structures; however, the DNR is only able to give very general recommendations within the current framework of the Shoreland Management Program.

### Flexibility and Mitigation

Current state standards do not provide alternative development options for unique circumstances, such as for people who own substandard lots that do not currently meet minimum standards.

Concerns: If the minimum standards could be more responsive to unique circumstances, and property owners are willing to mitigate or offset the impacts of their waterfront development, a balance could be struck between private property rights and natural resource protection.



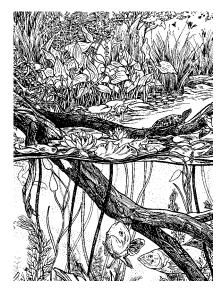
# Natural Scenic Beauty - Did you know?

In a Minnesota survey, waterfront property owners and lake users cited cabin and home development over 85% of the time as the cause when they perceived a decline in the scenic quality on the lake they used the most. Other activities at the top list that resulted in a decline in scenic quality included installation of docks and boat lifts, and removal of trees and shrubs in the shoreland area.

Anderson, K. A., T.L Kelly, R. M. Sushak, C.A. Hagley, D.A. Jensen, G. M. Kreag. 1999.
 Summary Report on Public Perception of the Impacts, Use, and Future of Minnesota Lakes:
 Results of the 1998 Minnesota Lakes Survey. A joint publication by the University of Minnesota Sea Grant Program (SH I) and Minnesota Department of Natural Resources,
 Office of Management and Budget Services.

### Want to know more?

For more information on the statewide minimum standards outlined in Wisconsin's Shoreland Management Program, or to provide suggestions on how the program can be improved, please contact:



Toni Herkert, Shoreland Management Team Leader Wisconsin Department of Natural Resources (608) 266-0161, Toni Herkert@dnr.state.wi.us

You also can ask to be placed on an e-mail or hard copy list of interested parties to receive information as it becomes available.

As the review process proceeds, information will also be posted on the Shoreland Management Program's webpage. Go to http://www.dnr.state.wi.us, use "Go to some topics" and choose "Shoreland Management" to reach this URL: http://www.dnr.state.wi.us/org/water/wm/dsfm/shore/title.htm

On the Shoreland Management Program's webpage, you can also find more detailed information on Chapter NR 115 and links to DNR publications, current research on shoreland systems, and contacts at county zoning departments.